CLAIMS

What is claimed is:

1. A method for provisioning databases for users on a wide area network, the method comprising the steps of:

a first party managing one or more database systems;

a plurality of second parties subscribing to database services supported by the one or more database systems managed by the first party; and

providing, over a network, to database applications controlled by the second parties, access to the database services to which the second parties are subscribed.

2. The method of claim 1 wherein:

at least one of said second parties is an application service provider that provides application services to a plurality of third parties over said network; and

the step of providing access to the database services includes providing database services to an application used by said application service provider to provide said application services to said third parties.

3. The method of claim 1 further comprising the steps of:

receiving over said network a request to perform a database management operation from a user associated with a particular second party of said plurality of second parties; and

responding to said request by performing said database management operation on one or more databases controlled by said first party without human intervention by said first party.

4. The method of claim 1 wherein the one or more database systems are implemented on a set of database devices that include a plurality of database appliances, a database appliance comprising database software and non-database software tailored to the needs of the database software.

5. The method of claim 1 wherein the step of providing access over a network includes providing access over a public network of computer networks.

6. The method of claim 3 wherein the step of performing the database management operation involves allocating a different amount of resources to said particular second party than is currently allocated for said particular second party.

7. The method of claim 1, further comprising the step of delivering to a party over the network one or more messages which cause generation of user interfaces that allow the party to subscribe to said database services provided by said first party.

8. The method of claim 7 wherein the user interfaces contain controls for specifying user profile information, payment information, and selection of database services.

9. The method of claim 1, further comprising the step of delivering over the network, to a user associated with one of said second parties, one or more messages which cause generation of user interfaces that allow the user to access a database for a database service to which said one of said second parties has subscribed.

10. The method of claim 1, wherein:

the first party also provides database application services over said network; and

the method further comprises the step of delivering over the network, to a user associated with one of said second parties, one or more messages which

cause generation of user interfaces that allow the user to access a database application service to which said one of said second parties has subscribed.

11. The method of claim 1, further comprising the step of delivering over the network, to a user associated with one of said second parties, one or more messages which cause generation of user interfaces that allow the user to indicate changes to at least one of profile information, payment information, and the selection of services to which said one of said second parties is subscribed.

12. The method of claim 1, further comprising the step of delivering over the network, to a user associated with one of said second parties, one or more messages which cause generation of user interfaces that allow the user to supply content for a subscribed database.

13. The method of claim 1, further comprising the step of delivering over the network, to a user associated with one of said second parties, one or more messages which cause generation of user interfaces that allow the user to develop a new database application.

14. The method of claim 1, further comprising the step of delivering over the network, to a user associated with one of said second parties, one or more messages which cause generation of user interfaces that allow the user to integrate an external service.

15. The method of claim 1, further comprising the step of delivering over the network, to a user associated with one of said second parties, one or more messages which cause generation of user interfaces that present a status of a user subscribed resource selected from database resources managed by said first party.

16. The method of claim 1, further comprising the steps of:

delivering over the network, to a user associated with one of said second parties, one or more messages which cause generation of user interfaces that present the user with a user-selectable representation of a wizard for building a Web page with a database component associated with an interface to a database;

receiving user input indicating the wizard; and

executing said wizard, including presenting a series of screens to the user to prompt user input for building the Web page.

17. The method of claim 1, further comprising the step of the first party updating the one or more database systems by receiving from a community server over the network an update to the one or more database systems, wherein the community server provides the update to a plurality of service providers over said network.

18. The method of claim 1, further comprising the step of the first party sending to a community server a status of a user subscribed resource, wherein the user subscribed resource is maintained by said first party.

19. The method of claim 1, further comprising presenting to a user associated with said first party a user interface to allow said first party to configure a database device used to provide said database services as one of a dedicated device and a plurality of virtual devices.

20. The method of claim 1, further comprising presenting to a user associated with said first party a user interface to allow said first party to configure at least one of a dedicated device and a virtual device of a plurality of virtual devices as one of a staging device available only to a database service developer for developing database services,

and a production device for making database services available to a user who is not the database service developer.

21. The method of claim 20, further comprising presenting a user interface for transferring an application from a staging device to a production device.

22. The method of claim 7 wherein:

the step of delivering to a party over the network one or more messages which cause generation of user interfaces that allow the party to subscribe to said database services is performed as part of a registration process;

the interfaces include controls for receiving a user input value for a maximum amount of subscribed resources; and

the method further includes the step of presenting an alert if an amount of subscribed resources consumed by said party exceeds a threshold percentage of the maximum amount of subscribed resources.

23. The method of claim 22, further comprising the steps of:

receiving a user input value for a particular threshold percentage; and

presenting an alert if an amount of resources consumed by said party exceeds the particular threshold percentage of the maximum amount of subscribed resources.

24. The method of claim 22, wherein the maximum amount of subscribed resources includes a maximum amount of at least one of

an amount of storage space,

a number of users connected to a platform in a period of time,

an amount of processor time used in a period of time, and

a number of transactions completed in a period of time.

25. The method of claim 12, further comprising the steps of:
presenting to the user a set of selectable sources of content;
receiving user input indicating a selected source; and
launching a source update process to connect to the selected source and update a database with information received from the selected sources.

26. The method of claim 25, wherein
the user input indicating a selected source also indicates a schedule for updating from the selected source; and
the source update process connects to the selected source according to the schedule for updating from the selected source.

27. The method of claim 12, further comprising the steps of:
in response to user input that specifies that data should be loaded into a subscribed database, determining whether the subscribed database currently exists for said one of said second parties; and
creating the subscribed database if the subscribed database does not currently exist for said one of said second parties.

28. The method of claim 13, further comprising the steps of:
presenting representations of selectable application development kits;
receiving user input indicating a selected development kit from the user; and
launching a staging process including
configuring consumable database resources on a staging database device, wherein a staging database device can be accessed by the user for

developing the new database application and cannot be accessed by users associated with other parties of said plurality of second parties,

receiving development input from the user; and

building a new application on the staging database device based on the selected development kit and the development input.

29. The method of claim 28, the step of developing the new database application further comprising the steps of

after receiving user input indicating a selected development kit, determining whether a client process of the selected development kit must be downloaded to a computer of the user over the wide area network; and

if it is determined the client process of the selected development kit must be downloaded, downloading the client process to the computer of the user over the wide area network before the step of building the new application.

30. The method of claim 28, the step of developing a new database application further comprising the steps of:

receiving input from the user indicating the new application is ready for operational use; and

in response to receiving input from the user indicating the new application is ready for operational use, launching a production transfer process including sending a request to the first party to transfer the new application to a production device on which the new application may be accessed by users who did not develop the new application.

31. The method of claim 14, further comprising integrating the external service, wherein the step of integrating comprises the steps of:

presenting a representation of a selectable external service;

receiving user input indicating a selected external service; and

launching an integration process to provide the external service to the user.

32. The method of claim 31, wherein the selectable external service includes at least one of a payment service, a mobile Internet portal, an enterprise resource planning application, and a customer relationship management application.

33. The method of claim 1, further comprising the first party performing at least one of the steps of:

setting up database parameters;

reporting database usage;

backing up the database;

upgrading the database;

controlling database versions;

implementing database security; and

implementing data security within the database.

34. The method of claim 1, further comprising the steps of:

if a costing database does not already exist, then

automatically creating the costing database of database resource usage by user, and

initiating a costing model with price per unit of consumable resource per service;

inserting data into the costing database based on actual use of database resources by the user;

executing the costing model to compute a cost-per-user based on the data in the costing database and the price per unit of consumable resource per service; and

billing the user for the cost computed by the costing model.

35. The method of claim 33, wherein the costing model supports:

fixed price per unit of usage;

variable price per unit usage as a function of usage;

flat price up to a maximum value of usage;

different prices for different users;

different prices for different services; and

different prices for increments of usage above a maximum subscribed usage.

36. A computer-readable medium carrying instructions for provisioning databases for users on a wide area network, the instructions comprising instructions for performing the steps of:

a first party managing one or more database systems;

a plurality of second parties subscribing to database services supported by the one or more database systems managed by the first party; and

providing, over a network, to database applications controlled by the second parties, access to the database services to which the second parties are subscribed.

37. The computer-readable medium of claim 36 wherein:

at least one of said second parties is an application service provider that provides application services to a plurality of third parties over said network; and

the step of providing access to the database services includes providing database services to an application used by said application service provider to provide said application services to said third parties.

38. The computer-readable medium of claim 36 further comprising instructions for performing the steps of:

receiving over said network a request to perform a database management operation from a user associated with a particular second party of said plurality of second parties; and

responding to said request by performing said database management operation on one or more databases controlled by said first party without human intervention by said first party.

39. The computer-readable medium of claim 36 wherein the one or more database systems are implemented on a set of database devices that include a plurality of database appliances, a database appliance comprising database software and non-database software tailored to the needs of the database software.

40. The computer-readable medium of claim 36 wherein the step of providing access over a network includes providing access over a public network of computer networks.

41. The computer-readable medium of claim 38 wherein the step of performing the database management operation involves allocating a different amount of resources to said particular second party than is currently allocated for said particular second party.

42. The computer-readable medium of claim 36, further comprising instructions for performing the step of delivering to a party over the network one or more messages which cause generation of user interfaces that allow the party to subscribe to said database services provided by said first party.

43. The computer-readable medium of claim 42 wherein the user interfaces contain controls for specifying user profile information, payment information, and selection of database services.

44. The computer-readable medium of claim 36, further comprising instructions for performing the step of delivering over the network, to a user associated with one of said second parties, one or more messages which cause generation of user interfaces that allow the user to access a database for a database service to which said one of said second parties has subscribed.

45. The computer-readable medium of claim 36, wherein:

the first party also provides database application services over said network; and

the computer-readable medium further comprises instructions for performing the step of delivering over the network, to a user associated with one of said second parties, one or more messages which cause generation of user interfaces that allow the user to access a database application service to which said one of said second parties has subscribed.

46. The computer-readable medium of claim 36, further comprising instructions for performing the step of delivering over the network, to a user associated with one of said second parties, one or more messages which cause generation of user interfaces that allow the user to indicate changes to at least one of profile

information, payment information, and the selection of services to which said one of said second parties is subscribed.

47. The computer-readable medium of claim 36, further comprising instructions for performing the step of delivering over the network, to a user associated with one of said second parties, one or more messages which cause generation of user interfaces that allow the user to supply content for a subscribed database.

48. The computer-readable medium of claim 36, further comprising instructions for performing the step of delivering over the network, to a user associated with one of said second parties, one or more messages which cause generation of user interfaces that allow the user to develop a new database application.

49. The computer-readable medium of claim 36, further comprising instructions for performing the step of delivering over the network, to a user associated with one of said second parties, one or more messages which cause generation of user interfaces that allow the user to integrate an external service.

50. The computer-readable medium of claim 36, further comprising instructions for performing the step of delivering over the network, to a user associated with one of said second parties, one or more messages which cause generation of user interfaces that present a status of a user subscribed resource selected from database resources managed by said first party.

51. The computer-readable medium of claim 36, further comprising instructions for performing the steps of:

delivering over the network, to a user associated with one of said second parties, one or more messages which cause generation of user interfaces that present the user with a user-selectable representation of a wizard for

building a Web page with a database component associated with an interface to a database;

receiving user input indicating the wizard; and

executing said wizard, including presenting a series of screens to the user to prompt user input for building the Web page.

52. The computer-readable medium of claim 36, further comprising instructions for performing the step of the first party updating the one or more database systems by receiving from a community server over the network an update to the one or more database systems, wherein the community server provides the update to a plurality of service providers over said network.

53. The computer-readable medium of claim 36, further comprising instructions for performing the step of the first party sending to a community server a status of a user subscribed resource, wherein the user subscribed resource is maintained by said first party.

54. The computer-readable medium of claim 36, further comprising instructions for presenting to a user associated with said first party a user interface to allow said first party to configure a database device used to provide said database services as one of a dedicated device and a plurality of virtual devices.

55. The computer-readable medium of claim 36, further comprising instructions for presenting to a user associated with said first party a user interface to allow said first party to configure at least one of a dedicated device and a virtual device of a plurality of virtual devices as one of a staging device available only to a database service developer for developing database services, and a production device for making database services available to a user who is not the database service developer.

56. The computer-readable medium of claim 55, further comprising instructions for presenting a user interface for transferring an application from a staging device to a production device.

57. The computer-readable medium of claim 42 wherein:

the step of delivering to a party over the network one or more messages which cause generation of user interfaces that allow the party to subscribe to said database services is performed as part of a registration process;

the interfaces include controls for receiving a user input value for a maximum amount of subscribed resources; and

the computer-readable medium further includes instructions for the step of presenting an alert if an amount of subscribed resources consumed by said party exceeds a threshold percentage of the maximum amount of subscribed resources.

58. The computer-readable medium of claim 57, further comprising instructions for performing the steps of:

receiving a user input value for a particular threshold percentage; and

presenting an alert if an amount of resources consumed by said party exceeds the particular threshold percentage of the maximum amount of subscribed resources.

59. The computer-readable medium of claim 57, wherein the maximum amount of subscribed resources includes a maximum amount of at least one of

an amount of storage space,

a number of users connected to a platform in a period of time,

an amount of processor time used in a period of time, and

a number of transactions completed in a period of time.

60. The computer-readable medium of claim 47, further comprising instructions for performing the steps of:

presenting to the user a set of selectable sources of content;

receiving user input indicating a selected source; and

launching a source update process to connect to the selected source and update a database with information received from the selected sources.

61. The computer-readable medium of claim 60, wherein

the user input indicating a selected source also indicates a schedule for updating from the selected source; and

the source update process connects to the selected source according to the schedule for updating from the selected source.

62. The computer-readable medium of claim 47, further comprising instructions for performing the steps of:

in response to user input that specifies that data should be loaded into a subscribed database, determining whether the subscribed database currently exists for said one of said second parties; and

creating the subscribed database if the subscribed database does not currently exist for said one of said second parties.

63. The computer-readable medium of claim 48, further comprising instructions for performing the steps of:

presenting representations of selectable application development kits;

receiving user input indicating a selected development kit from the user; and

launching a staging process including

configuring consumable database resources on a staging database device, wherein a staging database device can be accessed by the user for developing the new database application and cannot be accessed by users associated with other parties of said plurality of second parties,

receiving development input from the user; and

building a new application on the staging database device based on the selected development kit and the development input.

64. The computer-readable medium of claim 63, the step of developing the new database application further comprising the steps of

after receiving user input indicating a selected development kit, determining whether a client process of the selected development kit must be downloaded to a computer of the user over the wide area network; and

if it is determined the client process of the selected development kit must be downloaded, downloading the client process to the computer of the user over the wide area network before the step of building the new application.

65. The computer-readable medium of claim 63, the step of developing a new database application further comprising the steps of:

receiving input from the user indicating the new application is ready for operational use; and

in response to receiving input from the user indicating the new application is ready for operational use, launching a production transfer process including sending a request to the first party to transfer the new application to a

production device on which the new application may be accessed by users who did not develop the new application.

66. The computer-readable medium of claim 49, further comprising instructions for integrating the external service, wherein the step of integrating comprises the steps of:

presenting a representation of a selectable external service;

receiving user input indicating a selected external service; and

launching an integration process to provide the external service to the user.

67. The computer-readable medium of claim 66, wherein the selectable external service includes at least one of a payment service, a mobile Internet portal, an enterprise resource planning application, and a customer relationship management application.

68. The computer-readable medium of claim 36, further comprising instructions for the first party performing at least one of the steps of:

setting up database parameters;

reporting database usage;

backing up the database;

upgrading the database;

controlling database versions;

implementing database security; and

implementing data security within the database.

69. The computer-readable medium of claim 36, further comprising instructions for performing the steps of:

if a costing database does not already exist, then

automatically creating the costing database of database resource usage by user, and

initiating a costing model with price per unit of consumable resource per service;

inserting data into the costing database based on actual use of database resources by the user;

executing the costing model to compute a cost-per-user based on the data in the costing database and the price per unit of consumable resource per service; and

billing the user for the cost computed by the costing model.

70. The computer-readable medium of claim 68, wherein the costing model supports:

fixed price per unit of usage;

variable price per unit usage as a function of usage;

flat price up to a maximum value of usage;

different prices for different users;

different prices for different services; and

different prices for increments of usage above a maximum subscribed usage.